

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



07 FEB 2005

(43) International Publication Date
19 February 2004 (19.02.2004)

PCT

(10) International Publication Number
WO 2004/014779 A1(51) International Patent Classification⁷: B67C 3/20, 3/24

Luca [IT/IT]; Via Maglio 44, I-46044 Goito (IT). CAVALLARI, Stefano [IT/IT]; Via del Meloncello, 5, I-40135 Bologna (IT).

(21) International Application Number:

PCT/EP2003/050355

(74) Agents: JORIO, Paolo et al.; Studio Torta S.r.l., Via Viotti, 9, I-10121 Torino (IT).

(22) International Filing Date: 1 August 2003 (01.08.2003)

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

BO2002A000523 5 August 2002 (05.08.2002) IT

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,

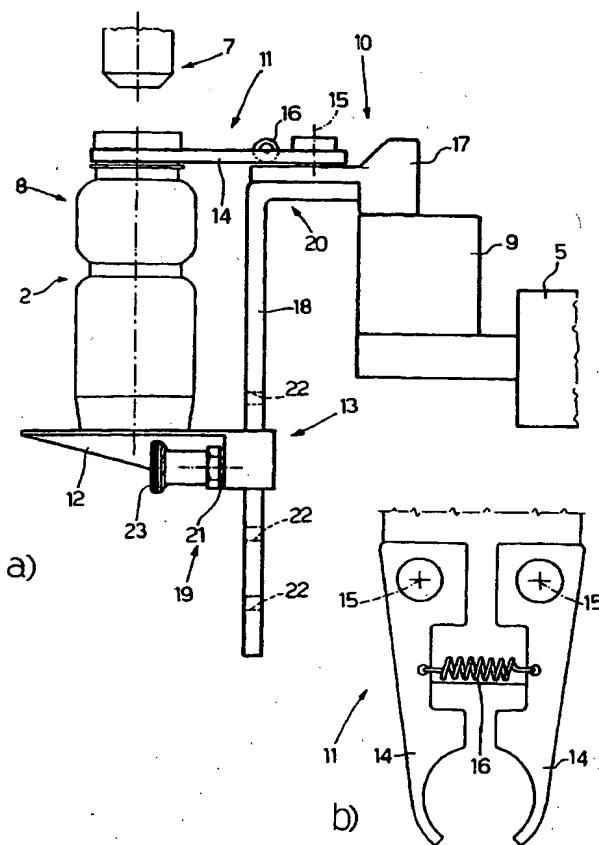
(71) Applicant (for all designated States except US): AZIONARIA COSTRUZIONI MACCHINE AUTOMATICHE A.C.M.A. S.P.A. [IT/IT]; Via Cristoforo Colombo, 1, I-40131 BOLOGNA (IT).

(72) Inventors; and

(75) Inventors/Applicants (for US only): GIACOMAZZI,

[Continued on next page]

(54) Title: MACHINE FOR FILLING CONTAINERS



(57) Abstract: A machine (1) for filling containers (2) has a carousel conveyor (5) having a vertical axis (6) and in turn having a number of filling heads (7), and an equal number of seats (8), each of which houses a respective container (2), is associated with a respective filling head (7), and is connected to the carousel conveyor (5) via the interposition of a weighing device (9) supported in a fixed position by the carousel conveyor (5). Each seat (8) has a frame (10), which supports a gripper (11) for engaging a top portion (4) of a respective container (2), and a plate (12) defining a horizontal supporting surface for the bottom of the respective container (2), and an adjusting device (13) for adjusting the vertical position of the plate (12), while maintaining the gripper (11) in a given vertical position close to the respective filling head (7).

WO 2004/014779 A1

EXPRESS MAIL LABEL
NO.: EV 481672711 US



SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

INTERNATIONAL SEARCH REPORT

International Application No

PCT/03/50355

A. CLASSIFICATION OF SUBJECT MATTER
 IPC 7 B67C3/20 B67C3/24

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
 IPC 7 B67C B65B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	EP 1 072 511 A (SHIBUYA KOGYO CO LTD) 31 January 2001 (2001-01-31) abstract; figures 1,2 -----	1,2
Y	GB 2 264 486 A (SPRUCE ARNOLD) 1 September 1993 (1993-09-01) page 2, paragraph 2 page 4, paragraph 5 – paragraph 6 page 5, line 12 – line 14 page 5, last paragraph page 6, paragraph 2 figures -----	1,2
A	WO 99 22209 A (SERAC GROUP) 6 May 1999 (1999-05-06) cited in the application ----- -/-	

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

- *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- *&* document member of the same patent family

Date of the actual completion of the international search

20 November 2003

Date of mailing of the international search report

27/11/2003

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Martínez Navarro, A.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/03/50355

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 778 633 A (SWEENEY KEVIN M) 14 July 1998 (1998-07-14) ---	
A	US 5 301 725 A (MEINZINGER RUPERT) 12 April 1994 (1994-04-12) ---	

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/03/50355

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
EP 1072511	A	31-01-2001	JP EP US	2001039493 A 1072511 A1 6399901 B1	13-02-2001 31-01-2001 04-06-2002
GB 2264486	A	01-09-1993		NONE	
WO 9922209	A	06-05-1999	FR BR CN DE DE DK EP ES WO JP JP PT US	2770292 A1 9815000 A 1118690 B 69808118 D1 69808118 T2 1025424 T3 1025424 A1 2182362 T3 9922209 A1 3420212 B2 2001521166 T 1025424 T 6073667 A	30-04-1999 03-10-2000 20-08-2003 24-10-2002 08-05-2003 13-01-2003 09-08-2000 01-03-2003 06-05-1999 23-06-2003 06-11-2001 28-02-2003 13-06-2000
US 5778633	A	14-07-1998	US US	5689932 A 5732528 A	25-11-1997 31-03-1998
US 5301725	A	12-04-1994	DE DE WO EP ES JP	9017262 U1 59107037 D1 9211197 A1 0515629 A1 2082446 T3 5503908 T	28-03-1991 18-01-1996 09-07-1992 02-12-1992 16-03-1996 24-06-1993